

ARKANSAS DEPARTMENT OF EDUCATION
MATHEMATICS ADOPTION

SCOTT FORESMAN
Investigations
IN NUMBER, DATA, AND SPACE®

© 2012



Common Core State Standards Correlation

and

**Common Core State Standards Comparison with
Arkansas Student Learning Expectations for Mathematics
Correlation**

Grade 3

**ARKANSAS DEPARTMENT OF EDUCATION
MATHEMATICS ADOPTION**

Two *Investigations in Number, Data and Space* Grade 3 correlations have been provided within this document.

- **Part 1** A Correlation of *Investigations in Number, Data and Space* Grade 3 to the Common Core State Standards for Mathematics. **Part 1** pages 1-8

- **Part 2** A Correlation of *Investigations in Number, Data and Space* Grade 3 to the Common Core State Standards Comparison with Arkansas Student Learning Expectations for Mathematics. **Part 2** pages 9-51

The correlation in Part 2 is included at the request of the Arkansas Department of Education and shows how both sets of criteria intersect and align to common content. Please note the CCSS introduces some content at different grade levels, as a result, several grade levels of the Arkansas Curriculum Framework were aligned to and were included at a single grade level. Consequently, the correlation reflects this shift to other levels.

Thank you in advance for your time and consideration of *Investigations* for Arkansas elementary students.

Table of Contents

Operations and Algebraic Thinking 3.OA	2
Number and Operations in Base Ten 3.NBT	4
Number and Operations—Fractions 3.NF.....	4
Measurement and Data 3.MD.....	6
Geometry 3.G	8

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
Operations and Algebraic Thinking 3.OA	
Represent and solve problems involving multiplication and division.	
1. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. [3.OA.1.]	U5 Sessions: 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.6, 4.7
2. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. [3.OA.2.]	U5 Sessions: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.1 [3.OA.3.]	U5 Sessions: 1.1, 1.2, 1.3, 1.4, 2.3, 2.4, 2.5, 2.6, 3.1, 3.3, 3.4, 4.1, 4.2, 4.3, 4.5, 4.6, 4.7 U6 Sessions: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U7 Sessions: 1.1, 2.1 U8 Session: 3.5
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. [3.OA.4.]	U5 Sessions: 1.3, 1.4, 2.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 U5 ICCG: 3.5A, 3.5B, 3.7A
Understand properties of multiplication and the relationship between multiplication and division.	
5. Apply properties of operations as strategies to multiply and divide. [3.OA.5.]	U5 Sessions: 1.4, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.6 U5 ICCG: 3.5A, 3.5B, 3.7A U6 Sessions: 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions: 1.2, 2.4

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
6. Understand division as an unknown-factor problem. [3.OA.6.]	U5 Sessions: 4.1, 4.2, 4.3, 4.4, 4.5, 4.6
Multiply and divide within 100.	
7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. [3.OA.7.]	U5 Sessions: 3.4, 3.6, 4.5, 4.6 U5 ICCG: 3.5A, 3.5B, 3.7A U6 Sessions: 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4 U7 Sessions: 1.2, 2.4 U7 ICCG: 1.4A U8 Session: 1.4
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	
8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. <i>(This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).)</i> [3.OA.8.]	U1 Sessions: 1.3, 1.4, 1.6, 1.7, 1.8, 2.3, 2.5, 2.7, 2.8 U3 Sessions: 1.4, 1.5, 2.1, 2.3, 2.4, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4 U5 Session: 4.5 U6 Sessions: 3.2, 3.3, 3.5, 3.7 U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.3, 3.6, 3.7, 3.8, 3.9 U9 ICCG: 4A.3
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. [3.OA.9.]	U1 Sessions: 1.2, 1.4, 1.7, 2.2, 2.3, 2.6 U3 Sessions: 1.1, 1.5, 1.6, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2, 3.3, 4.4 U5 Sessions: 1.3, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 4.1 U5 ICCG: 3.5A, 3.5B, 3.6, 3.7A U6 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
Number and Operations in Base Ten 3.NBT	
Use place value understanding and properties of operations to perform multi-digit arithmetic. (A range of algorithms may be used.)	
1. Use place value understanding to round whole numbers to the nearest 10 or 100. [3.NBT.1.]	U3 ICCG: 1.7A U4 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.4, 2.5, 3.2, 3.5, 3.6 U4 ICCG: 2.5A U6 Sessions: 2.2, 3.1, 3.3, 3.4 U7 Sessions: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4 U7 ICCG: 1.4A, 1.4B, U9 Sessions: 2.1, 2.2, 2.3 U9 ICCG: 4A.1, 4A.2, 4A.3
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. [3.NBT.2.]	U1 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 U3 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 U4 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.4, 2.5, 3.2, 3.5, 3.6 U4 ICCG: 2.5A U6 Sessions: 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4 U7 Sessions: 1.1, 1.2, 1.3, 2.1, 2.2, 2.3, 2.4 U7 ICCG: 1.4A, 1.4B U8 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 U9 Sessions: 2.1, 2.2, 2.3 U9 ICCG: 4A.1, 4A.2, 4A.3
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations. [3.NBT.3.]	U5 ICCG: 3.7A
Number and Operations—Fractions 3.NF	
Develop understanding of fractions as numbers.	
1. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. [3.NF.1.]	U7 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. [3.NF.2.]	
a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. [3.NF.2.a.]	U7 ICCG: 1.4A, 1.4B
b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. [3.NF.2.b.]	U7 ICCG: 1.4A, 1.4B
3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. [3.NF.3.]	
a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. [3.NF.3.a.]	U7 Sessions: 1.1, 1.2, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4 U7 ICCG: 1.4A, 1.4B
b. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model. [3.NF.3.b.]	U7 Sessions: 1.5, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4
c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. [3.NF.3.c.]	U7 Sessions: 1.3, 2.1, 2.2, 2.3, 2.4, 3.4 U7 ICCG: 1.4A, 1.4B
d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. [3.NF.3.d.]	U7 Sessions: 1.2, 1.3 U7 ICCG: 1.4B

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
Measurement and Data 3.MD	
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	
1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. [3.MD.1.]	U3 Sessions:: 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 U3 ICCG: 1.7A U5 Sessions:: 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U7 ICCG: 3.1A U5 Sessions:: 1.4, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. <i>(Excludes compound units such as cm^3 and finding the geometric volume of a container. Excludes multiplicative comparison problems (problems involving notions of “times as much”).)</i> [3.MD.2.]	U9 ICCG: 4A.1, 4A.2, 4A.3
Represent and interpret data.	
3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. [3.MD.3.]	U2 Sessions: 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.2, 3.5 U2 ICCG: 2.3A
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. [3.MD.4.]	U2 Sessions: 3.1, 3.2, 3.3, 3.4

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	
5. Recognize area as an attribute of plane figures and understand concepts of area measurement. [3.MD.5.]	
a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. [3.MD.5.a.]	U4 Sessions: 2.2, 2.3, 2.4, 2.5, 2.6, 3.6 U4 ICCG: 2.5A
b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. [3.MD.5.b.]	U4 Sessions: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.6 U4 ICCG: 2.5A
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). [3.MD.6.]	U4 Sessions: 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.6 U4 ICCG: 2.5A
7. Relate area to the operations of multiplication and addition. [3.MD.7.]	
a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. [3.MD.7.a.]	U4 Session: 2.4 U5 Sessions: 3.1, 3.2, 3.3, 3.4 U5 ICCG: 3.1A, 3.5A
b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. [3.MD.7.b.]	U4 Session: 2.4 U5 Sessions: 3.1, 3.3, 3.4, 3.6 U5 ICCG: 3.1A, 3.5A

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

A Correlation of *Investigations In Number, Data, and Space* © 2012
to the Common Core State Standards for Mathematics

Common Core State Standards for Mathematics Grade 3	Investigations in Number, Data, and Space ©2012 Grade 3
c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning. [3.MD.7.c.]	U5 Sessions: U5 ICCG: 3.1A, 3.5A
d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems. [3.MD.7.d.]	U4 Sessions: 2.3, 2.4, 2.5A, 2.5 U4 ICCG: 32.5A U5 ICCG: 3.1A, 3.5A
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	
8. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. [3.MD.8.]	U4 Sessions: 1.2, 1.3, 1.4, 1.5 U4 ICCG: 2.5A
Geometry 3.G	
Reason with shapes and their attributes.	
1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. [3.G.1.]	U4 Sessions: 3.1, 3.2, 3.3, 3.4, 3.5, 3.6
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. [3.G.2.]	U7 Sessions: 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.3, 3.4

Grade 3 Curriculum Units

U1 Trading Stickers, Combining Coins
U2 Surveys and Line Plots
U3 Collections and Travel Stories
U4 Perimeter, Angles, and Area
U5 Equal Groups

U6 Stories, Tables, and Graphs
U7 Finding Fair Shares
U8 How Many Hundreds? How Many Miles?
U9 Solids and Boxes

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Table of Contents

Operations and Algebraic Thinking	10
Number and Operations in Base Ten	22
Number and Operations—Fractions.....	26
Measurement and Data	36
Geometry.....	49

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
Operations and Algebraic Thinking		
CC.3.OA.1 Represent and solve problems involving multiplication and division. Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .	AR.3.NO.2.3 (NO.2.3.3) Whole Number Operations: Use conventional mathematical symbols to write equations for contextual problems involving multiplication	U5 Sessions 1.2, 1.3, 1.4, 2.3, 2.4, 2.6
	AR.3.NO.2.1 (NO.2.3.1) Number Theory: Develop an understanding of the commutative and identity properties of multiplication using objects	U5 Sessions 3.1, 3.5
	AR.3.NO.2.2 (NO.2.3.2) Number Theory: Apply number theory: -- determine if a three-digit number is even or odd, -- use the terms multiple, factor, product and quotient in an appropriate context	U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4 The term Quotient is addressed in Grade 5: U1 Session 3.1

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.2 Represent and solve problems involving multiplication and division. Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</p>	<p>AR.K.NO.2.4 (NO.2.K.4) Whole Number Operations: Partition or share a small set of objects into groups of equal size e.g., sharing 6 pencils equally among 3 children</p>	<p>U5 Sessions 4.1, 4.2</p>
	<p>AR.1.NO.2.6 (NO.2.1.6) Whole Number Operations: Model and represent division as sharing equally in contextual situations</p>	<p>U5 Sessions 4.1, 4.2</p>
	<p>AR.2.NO.2.7 (NO.2.2.7) Whole Number Operations: Model, represent and explain division as sharing equally and repeated subtraction in contextual situations</p>	<p>U5 Sessions 4.1, 4.2</p>
	<p>AR.3.NO.2.4 (NO.2.3.4) Whole Number Operations: Model, represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison</p>	<p>U5 Sessions 4.1, 4.2, 4.4</p>
	<p>AR.4.NO.2.4 (NO.2.4.4) Whole Number Operations: Represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison</p>	<p>U5 Sessions 4.1, 4.2, 4.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.3 Represent and solve problems involving multiplication and division. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p>AR.3.NO.2.4 (NO.2.3.4) Whole Number Operations: Model, represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison</p>	<p>U5 Sessions 4.1, 4.2, 4.4</p>
	<p>AR.3.NO.3.3 (NO.3.3.3) Computational Fluency-Multiplication and Division: Develop, with and without appropriate technology, computational fluency in multiplication and division up to two-digit by one-digit numbers using two-digit by one-digit number contextual problems using: -- strategies for multiplying and dividing numbers, -- performance of operations in more than one way, -- estimation of products and quotients in appropriate situations, and relationships between operations</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7</p>
	<p>AR.4.NO.2.4 (NO.2.4.4) Whole Number Operations: Represent and explain division as measurement and partitive division including equal groups, related rates, price, rectangular arrays (area model), combinations and multiplicative comparison</p>	<p>U5 Sessions 4.1, 4.2, 4.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.3 Represent and solve problems involving multiplication and division. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p>	<p>AR.4.NO.3.3 (NO.3.4.3) Computational Fluency- Multiplication and Division: Attain, with and without appropriate technology, computational fluency in multiplication and division using contextual problems using: -- two-digit by two-digit multiplication (larger numbers with technology), -- up to three-digit by two-digit division (larger numbers with technology), -- strategies for multiplication and dividing numbers, -- performance of operations in more than one way, -- estimation of products and quotients in appropriate situations, and -- relationships between operations</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7</p>
<p>CC.3.OA.4 Represent and solve problems involving multiplication and division. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \underline{\quad} \div 3$, $6 \times 6 = ?$.</p>	<p>AR.3.A.5.1 (A.5.3.1) Expressions, Equations and Inequalities: Select and/or write number sentences (equations) to find the unknown in problem- solving contexts involving two-digit times one-digit multiplication using appropriate labels</p>	<p>U5 Sessions 1.2, 1.4</p>
	<p>AR.3.A.5.3 (A.5.3.3) Expressions, Equations and Inequalities: Use a symbol to represent an unknown quantity in a number sentence involving contextual situations and find the value</p>	<p>U5 Sessions 1.2, 1.4, 4.2, 4.3</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued)	AR.4.A.5.3 (A.5.4.3) Expressions, Equations and Inequalities: Use a variable to represent an unknown quantity in a number sentence involving contextual situations and find the value	U5 Sessions 1.2, 1.4, 4.2, 4.3
CC.3.OA.5 Understand properties of multiplication and the relationship between multiplication and division. Apply properties of operations as strategies to multiply and divide. Examples: If $6 \times 4 = 24$ is known, then $4 \times 6 = 24$ is also known. (Commutative property of multiplication.) $3 \times 5 \times 2$ can be found by $3 \times 5 = 15$ then $15 \times 2 = 30$, or by $5 \times 2 = 10$ then $3 \times 10 = 30$. (Associative property of multiplication.) Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$. (Distributive property.) (Students need not use formal terms for these properties.)	AR.3.NO.2.1 (NO.2.3.1) Number Theory: Develop an understanding of the commutative and identity properties of multiplication using objects	U5 Sessions 3.1, 3.5
	AR.4.NO.2.1 (NO.2.4.1) Number Theory: Develop an understanding of the associative and zero properties of multiplication using objects	U5 Sessions 1.4, 2.4, 2.5, 3.5
	AR.5.NO.2.2 (NO.2.5.2) Number theory: Identify commutative and associative properties	U5 Sessions 3.1, 3.5
	AR.5.NO.2.3 (NO.2.5.3) Number theory: Identify the distributive property by using physical models to solve computation and real world problems	U5 Session 3.5 U5 ICCG 3.5A
	AR.6.NO.2.2 (NO.2.6.2) Number theory: Apply the distributive property of multiplication over addition to simplify computations with whole numbers	U5 Session 3.5 U5 ICCG 3.5A

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.6 Understand properties of multiplication and the relationship between multiplication and division. Understand division as an unknown-factor problem. For example, divide $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</p>	<p>AR.4.NO.2.2 (NO.2.4.2) Number Theory: Apply number theory: -- determine if any number is even or odd, -- use the terms 'multiple,' 'factor,' and 'divisible by' in an appropriate context, -- generate and use divisibility rules for 2, 5, and 10, -- demonstrate various multiplication & division relationships</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.1, 4.2, 4.4</p>
	<p>AR.3.NO.2.2 (NO.2.3.2) Number Theory: Apply number theory: -- determine if a three-digit number is even or odd, -- use the terms multiple, factor, product and quotient in an appropriate context</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4 The term Quotient is addressed in Grade 5: U1 Sessions 3.1</p>
	<p>AR.8.NO.2.2 (NO.2.8.2) Number theory: Understand and apply the inverse and identity properties</p>	<p>U5 Sessions 3.1, 3.5, 4.1, 4.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.7 Multiply and divide within 100. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of one-digit numbers.</p>	<p>AR.3.NO.3.2 (NO.3.3.2) Computational Fluency-Multiplication and Division: Develop, with and without appropriate technology, fluency with basic number combinations for multiplication and division facts (10×10)</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U8 Session 1.4</p>
	<p>AR.3.NO.3.3 (NO.3.3.3) Computational Fluency-Multiplication and Division: Develop, with and without appropriate technology, computational fluency in multiplication and division up to two-digit by one-digit numbers using two-digit by one-digit number contextual problems using: -- strategies for multiplying and dividing numbers, -- performance of operations in more than one way, -- estimation of products and quotients in appropriate situations, and -- relationships between operations</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U8 Session 1.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.OA.7 Multiply and divide within 100. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of one-digit numbers.</p>	<p>AR.4.NO.3.3 (NO.3.4.3) Computational Fluency-Multiplication and Division: Attain, with and without appropriate technology, computational fluency in multiplication and division using contextual problems using: -- two-digit by two-digit multiplication (larger numbers with technology), -- up to three-digit by two-digit division (larger numbers with technology), -- strategies for multiplication and dividing numbers, -- performance of operations in more than one way, -- estimation of products and quotients in appropriate situations, and -- relationships between operations</p>	<p>Grade 5: U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.8 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).)</p>	<p>AR.2.A.5.1 (A.5.2.1) Expressions, Equations and Inequalities: Select and/or write number sentences to find the unknown in problem-solving contexts involving two-digit addition and subtraction using appropriate labels</p>	<p>U1 Sessions 1.1, 1.2, 1.3, 1.4, 1.5 U8 Sessions 2.1, 2.2, 2.3, 2.4, 3.2, 3.3, 3.5, 3.6</p>
	<p>AR.3.A.5.1 (A.5.3.1) Expressions, Equations and Inequalities: Select and/or write number sentences (equations) to find the unknown in problem-solving contexts involving two-digit times one-digit multiplication using appropriate labels</p>	<p>U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6</p>
	<p>AR.4.A.5.1 (A.5.4.1) Expressions, Equations and Inequalities: Select and/or write number sentences (equations) to find the unknown in problem-solving contexts involving two-digit by one-digit division using appropriate labels</p>	<p>U5 Sessions 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.OA.8 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).)</p>	<p>AR.6.A.5.2 (A.5.6.2) Expressions, Equations and Inequalities: Write simple algebraic expressions using appropriate operations (+, -, x, /) with one variable</p>	<p>An opportunity to address this topic may be found on the following pages: U1 Sessions 1.3, 1.4, 1.6, 1.7, 1.8, 2.3, 2.5, 2.7, 2.8 U3 Sessions 1.4, 1.5, 2.1, 2.3, 2.4, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4 U5 Session 4.5 U6 Sessions 3.2, 3.3, 3.5, 3.7 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 3.6, 3.7, 3.8, 3.9</p>
	<p>AR.6.A.5.3 (A.5.6.3) Expressions, Equations and Inequalities: Evaluate algebraic expressions with one variable using appropriate properties and operations (+, -, x, /)</p>	<p>An opportunity to address this topic may be found on the following pages: U1 Sessions 1.3, 1.4, 1.6, 1.7, 1.8, 2.3, 2.5, 2.7, 2.8 U3 Sessions 1.4, 1.5, 2.1, 2.3, 2.4, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4 U5 Session 4.5 U6 Sessions 3.2, 3.3, 3.5, 3.7 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.3, 3.6, 3.7, 3.8, 3.9</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.OA.8 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).)</p>	<p>AR.6.NO.2.4 (NO.2.6.4) Number theory: Apply rules (conventions) for order of operations to whole numbers with and without parentheses</p>	<p>U1 Sessions 1.5</p>
	<p>AR.2.NO.3.5 (NO.3.2.5) Estimation: Use estimation strategies to solve addition and subtraction problems and judge the reasonableness of the answer</p>	<p>U1 Sessions 2.3 U1 Ten-Minute Math 2.4, 2.5, 2.6, 2.7, 2.8 U3 Sessions 1.5, 2.2 U8 Sessions 1.3, 2.2, 2.4, 3.1, 3.2</p>
	<p>AR.2.A.4.2 (A.4.2.2) Recognize, describe and develop patterns: Describe repeating and growing patterns in the environment</p>	<p>Opportunities to address this topic may be found on the following pages: U1 Sessions 1.3, 1.4, 1.6, 1.7, 1.8, 2.3, 2.5, 2.7, 2.8 U3 Sessions 1.4, 1.5, 2.1, 2.3, 2.4, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4 U5 Session 4.5 U6 Sessions 3.2, 3.3, 3.5, 3.7 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.3, 3.6, 3.7, 3.8, 3.9</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.OA.9 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</p>	<p>AR.4.NO.2.2 (NO.2.4.2) Number Theory: Apply number theory: -- determine if any number is even or odd, -- use the terms 'multiple,' 'factor,' and 'divisible by' in an appropriate context, -- generate and use divisibility rules for 2, 5, and 10, -- demonstrate various multiplication & division relationships</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4 U6 Sessions Ten-Minute Math 1.2, 1.4</p>
	<p>AR.5.NO.2.1 (NO.2.5.1) Number theory: Use divisibility rules to determine if a number is a factor of another number (2, 3, 5, 10)</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4 U6 Ten-Minute Math 1.2, 1.4</p>
	<p>AR.6.NO.2.1 (NO.2.6.1) Number theory: Use divisibility rules to determine if a number is a factor of another number (4, 6, 9)</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4 U6 Ten-Minute Math 1.2, 1.4</p>
	<p>AR.1.A.6.1 (A.6.1.1) Algebraic Models and Relationships: Explore the use of a chart or table to organize information and to understand relationships</p>	<p>U6 Sessions 3.2, 3.3, 3.4</p>
	<p>AR.2.A.6.1 (A.6.2.1) Algebraic Models and Relationships: Use a chart or table to organize information and to understand relationships</p>	<p>U6 Sessions 3.2, 3.3, 3.4</p>
	<p>AR.2.A.4.2 (A.4.2.2) Recognize, describe and develop patterns: Describe repeating and growing</p>	<p>U1 Sessions 1.2, 1.4, 2.3, 2.6 U3 Sessions 1.1, 1.5, 1.6, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2,</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.OA.9 Solve problems involving the four operations, and identify and explain patterns in arithmetic. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.</p>	<p>patterns in the environment (Continued)</p>	<p>3.3, 4.4 U5 Sessions 1.3, 2.1, 2.4, 2.5, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1 U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9</p>
<p>Number and Operations in Base Ten</p>		
<p>CC.3.NBT.1 Use place value understanding and properties of operations to perform multi-digit arithmetic. Use place value understanding to round whole numbers to the nearest 10 or 100</p>	<p>No Matches in Arkansas Frameworks</p>	<p>U3 Session 1.7A U4 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.4, 2.5A, 2.5, 3.2, 3.5, 3.6 U6 Sessions 2.2, 3.1, 3.3, 3.4 U7 Sessions 1.1, 1.2, 1.3, 1.4A, 1.4B, 2.1, 2.2, 2.3, 2.4 U9 Sessions 2.1, 2.2, 2.3</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NBT.2 Use place value understanding and properties of operations to perform multi-digit arithmetic. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. (A range of algorithms may be used.)</p>	<p>AR.3.NO.3.1 (NO.3.3.1) Computational Fluency-Addition and Subtraction: Develop, with and without appropriate technology, computational fluency, in multi-digit addition and subtraction through 999 using contextual problems: - - strategies for adding and subtracting numbers, -- estimation of sums and differences in appropriate situations, -- relationships between operations</p>	<p>U1 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 U3 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 U4 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.4, 2.5, 2.5, 3.2, 3.5, 3.6 U6 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4 U7 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 3.8, 3.9 U9 Sessions 2.1, 2.2, 2.3</p>
	<p>AR.4.NO.3.1 (NO.3.4.1) Computational Fluency-Addition and Subtraction: Demonstrate, with and without appropriate technology, computational fluency in multi-digit addition and subtraction in contextual problems</p>	<p>U1 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7, 1.8, 1.9, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8 U3 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6 U4 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.4, 2.5, 2.5, 3.2, 3.5, 3.6 U6 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4 U7 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4 U8 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 2.1, 2.2, 2.3, 2.4, 2.5, 3.1, 3.2, 3.3, 3.4, 3.5,</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued) CC.3.NBT.2 Use place value understanding and properties of operations to perform multi-digit arithmetic. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. (A range of algorithms may be used.)	(Continued) AR.4.NO.3.1 (NO.3.4.1) Computational Fluency-Addition and Subtraction: Demonstrate, with and without appropriate technology, computational fluency in multi-digit addition and subtraction in contextual problems	3.6, 3.7, 3.8, 3.9 U9 Sessions 2.1, 2.2, 2.3
CC.3.NBT.3 Use place value understanding and properties of operations to perform multi-digit arithmetic. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations. (A range of algorithms may be used.)	AR.3.NO.3.3 (NO.3.3.3) Computational Fluency-Multiplication and Division: Develop, with and without appropriate technology, computational fluency in multiplication and division up to two-digit by one-digit numbers using two-digit by one-digit number contextual problems using: -- strategies for multiplying and dividing numbers, -- performance of operations in more than one way, -- estimation of products and quotients in appropriate situations, and -- relationships between operations	U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7
	AR.3.NO.3.2 (NO.3.3.2) Computational Fluency-Multiplication and Division: Develop, with and without appropriate technology, fluency with basic number combinations for multiplication and division facts (10 x 10)	U5 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U5 ICCG 3.5A, 3.5B, 3.7A U8 Sessions 1.4

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NBT.3 Use place value understanding and properties of operations to perform multi-digit arithmetic. Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations. (A range of algorithms may be used.)</p>	<p>AR.4.NO.2.2 (NO.2.4.2) Number Theory: Apply number theory: -- determine if any number is even or odd, -- use the terms 'multiple,' 'factor,' and 'divisible by' in an appropriate context, -- generate and use divisibility rules for 2, 5, and 10, -- demonstrate various multiplication & division relationships</p>	<p>U5 Sessions 2.1, 2.2, 2.3, 2.4, 2.5, 3.3, 3.4, 4.4</p>
	<p>AR.4.A.4.1 (A.4.4.1) Recognize, describe and develop patterns: Identify a number that is more or less than any whole number using multiples of 10, 100 and/or 1000</p>	<p>U3 Sessions 2.1 U5 Sessions 2.1, 2.2 U5 ICCG 3.7A</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
Number and Operations–Fractions * * = Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.		
CC.3.NF.1 Develop understanding of fractions as numbers. Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)	AR.3.NO.1.4 (NO.1.3.4) Rational Numbers: Represent fractions (halves, thirds, fourths, sixths and eighths) using words, numerals and physical models	U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A
	AR.K.NO.1.11 (NO.1.K.11) Rational Numbers: Use physical models and drawings to represent commonly used fractions such as halves, thirds and fourths in relation to the whole	U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B
	AR.1.NO.1.12 (NO.1.1.12) Rational Numbers: Represent commonly used fractions using words and physical models for halves, thirds and fourths	U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B
	AR.2.NO.1.9 (NO.1.2.9) Rational Numbers: Represent fractions (halves, thirds, fourths, sixths and eighths) using words, numerals, and physical models	U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B
	AR.3.NO.1.5 (NO.1.3.5) Rational Numbers: Utilize models to recognize that the size of the whole determines the size of the fraction depending on the original quantity	See opportunities to address this topic: U7 Sessions 1.4, 1.5, 1.6

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.1 Develop understanding of fractions as numbers. Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.4.NO.1.5 (NO.1.4.5) Rational Numbers: Utilize models, benchmarks, and equivalent forms to recognize that the size of the whole determines the size of the fraction</p>	<p>See opportunities to address this topic: U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4</p>
<p>CC.3.NF.2 Develop understanding of fractions as numbers. Understand a fraction as a number on the number line; represent fractions on a number line diagram. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.4.NO.1.4 (NO.1.4.4) Rational Numbers: Write a fraction to name part of a whole, part of a set, a location on a number line, and the division of whole numbers, using models</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B</p>
	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); -- -Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.2a Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint of the part based at 0 locates the number $\frac{1}{b}$ on the number line. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.4.NO.1.4 (NO.1.4.4) Rational Numbers: Write a fraction to name part of a whole, part of a set, a location on a number line, and the division of whole numbers, using models</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4</p>
	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); ---Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Sessions 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.2b Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.4.NO.1.4 (NO.1.4.4) Rational Numbers: Write a fraction to name part of a whole, part of a set, a location on a number line, and the division of whole numbers, using models</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B</p>
	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); ---Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
CC.3.NF.3 Develop understanding of fractions as numbers. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)	AR.4.NO.1.5 (NO.1.4.5) Rational Numbers: Utilize models, benchmarks, and equivalent forms to recognize that the size of the whole determines the size of the fraction	An opportunity to address this topic may be found on the following pages: U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4
	AR.3.NO.1.7 (NO.1.3.7) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4
	AR.4.NO.1.8 (NO.1.4.8) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.4A, 1.5, 2.1, 2.1, 2.2, 2.3, 2.4
	AR.5.NO.1.5 (NO.1.5.5) Rational Numbers: Use models of benchmark fractions and their equivalent forms: -- to analyze the size of fractions, -- to determine that simplification does not change the value of the fraction, -- to convert between mixed numbers and improper fractions	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.NF.3 Develop understanding of fractions as numbers. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); ---Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Sessions 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>
	<p>AR.6.NO.1.4 (NO.1.6.4) Rational Numbers: Convert, compare and order fractions (mixed numbers and improper fractions) decimals and percents and find their approximate locations on a number line</p>	<p>U7 Sessions 1.2, 3.1, 3.2, 3.3, 3.4 Ordering on a number line and Percents Grade 5: U4 Sessions 1.2, 1.4, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6 U6 Sessions 1.1, 1.6, 1.9, 1.10</p>
	<p>AR.4.NO.1.7 (NO.1.4.7) Rational Numbers: Write an equivalent decimal for a given fraction relating to money</p>	<p>U7 Sessions 3.1, 3.2, 3.3, 3.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.3a Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.5.NO.1.5 (NO.1.5.5) Rational Numbers: Use models of benchmark fractions and their equivalent forms: -- to analyze the size of fractions, -- to determine that simplification does not change the value of the fraction, -- to convert between mixed numbers and improper fractions</p>	<p>U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4</p>
	<p>AR.4.NO.1.5 (NO.1.4.5) Rational Numbers: Utilize models, benchmarks, and equivalent forms to recognize that the size of the whole determines the size of the fraction</p>	<p>See opportunities to address this topic: U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4</p>
	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); ---Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued)	AR.4.NO.1.8 (NO.1.4.8) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A
	AR.3.NO.1.7 (NO.1.3.7) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4
CC.3.NF.3b Recognize and generate simple equivalent fractions (e.g., $1/2 = 2/4$, $4/6 = 2/3$), Explain why the fractions are equivalent, e.g., by using a visual fraction model. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)	AR.3.NO.1.7 (NO.1.3.7) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A
	AR.4.NO.1.8 (NO.1.4.8) Rational Numbers: Write a fraction that is equivalent to a given fraction with the use of models	U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A
	AR.4.NO.1.7 (NO.1.4.7) Rational Numbers: Write an equivalent decimal for a given fraction relating to money	U7 Sessions 3.1, 3.2, 3.3, 3.4

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.3c Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of a number line diagram. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.5.NO.1.5 (NO.1.5.5) Rational Numbers: Use models of benchmark fractions and their equivalent forms: -- to analyze the size of fractions, -- to determine that simplification does not change the value of the fraction, -- to convert between mixed numbers and improper fractions</p>	<p>U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4</p>
	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; ---Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); ---Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.3d Compare two fractions with the same numerator or the same denominator, by reasoning about their size, Recognize that valid comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.5.NO.1.1 (NO.1.5.1) Rational Numbers: Use models and visual representations to develop the concepts of the following: ---Fractions: parts of unit wholes, parts of a collection, locations on number lines, locations on ruler (benchmark fractions), divisions of whole numbers; - --Ratios: part-to-part (2 boys to 3 girls), part-to-whole (2 boys to 5 people); --- Percents: part-to-100</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>
	<p>AR.5.NO.1.5 (NO.1.5.5) Rational Numbers: Use models of benchmark fractions and their equivalent forms: -- to analyze the size of fractions, -- to determine that simplification does not change the value of the fraction, -- to convert between mixed numbers and improper fractions</p>	<p>U7 Sessions 1.5, 2.1, 2.1, 2.2, 2.3, 2.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.NF.3d Compare two fractions with the same numerator or the same denominator, by reasoning about their size, Recognize that valid comparisons rely on the two fractions referring to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model. (Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.)</p>	<p>AR.6.NO.1.4 (NO.1.6.4) Rational Numbers: Convert, compare and order fractions (mixed numbers and improper fractions) decimals and percents and find their approximate locations on a number line</p>	<p>U7 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 2.1, 2.2, 2.3, 2.4 U7 ICCG 1.4A, 1.4B Ratio Grade 4: U9 Session 2.4 Percents Grade 5: U4 Sessions 1.1, 1.2 U6 Sessions 1.1, 1.2</p>
<p>Measurement and Data</p>		
<p>CC.3.MD.1 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p>	<p>AR.K.M.13.2 (M.13.K.2) Clock: Tell time to the hour the nearest hour using analog and digital clock</p>	<p>U3 Session 3.1 Ten-Minute Math: U3 Sessions 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>
	<p>AR.4.M.12.1 (M.12.4.1) Time: Clock: Recognize that 60 seconds equals 1 minute</p>	<p>U3 Session 3.1 Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.6, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>
	<p>AR.1.M.13.2 (M.13.1.2) Clock: Tell time to the half-hour</p>	<p>U3 Session 3.1 Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.5, 3.7, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued) CC.3.MD.1 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	AR.3.M.13.2 (M.13.3.2) Clock: Tell time to the nearest one-minute intervals	U3 Session 3.1 Ten-Minute Math: U3 Sessions 3.3, 3.4, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6
	AR.6.M.13.1 (M.13.6.1) Attributes and Tools: Solve real world problems involving one elapsed time, counting forward and backward (calendar and clock)	Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6 U5 Sessions 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U5 ICCG 3.1A U7 Sessions 1.4, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4
	AR.2.M.13.2 (M.13.2.2) Clock: Tell time to the nearest five-minute interval	U3 Session 3.1 U3 ICCG 1.7A Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.5, 3.6, 3.7, 4.1, 4.2, 4.4, 4.5, 4.6
	AR.3.M.13.4 (M.13.3.4) Elapsed Time: Determine elapsed time in contextual situations to five-minute intervals	Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6 U5 Sessions 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U5 ICCG 3.1A U7 Sessions 1.4, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
CC.3.MD.1 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	AR.5.M.13.1 (M.13.5.1) Attributes and Tools: Solve real world problems involving one elapsed time, counting forward (calendar and clock)	Ten-Minute Math: U3 Sessions 3.2, 3.3, 3.4, 3.6, 4.2, 4.3, 4.4, 4.5, 4.6 U5 Sessions 1.1, 1.2, 1.3, 1.4, 3.1, 3.2, 3.3, 4.1, 4.2, 4.3, 4.4, 4.5, 4.6, 4.7 U5 ICCG 3.1A U7 Sessions 1.4, 1.5, 1.6, 3.1, 3.2, 3.3, 3.4
	AR.K.M.13.3 (M.13.K.3) Elapsed Time: Order events based on time	Grade 2: U9 Sessions 4.1, 4.2, 4.3, 4.4, 4.5, 4.6
	AR.2.M.13.9 (M.13.2.9) Temperature: Read temperatures on a Fahrenheit scale in intervals of ten	U6 Sessions 1.1, 1.2, 1.3
	AR.2.M.13.2 (M.13.2.1) Calendar: Use a calendar to determine elapsed time involving a time period within a given month	Grade K: U1 Session 1.3 Classroom Routines: U1 Sessions 1.5, 1.6, 2.1, 2.2
	AR.1.M.13.1 (M.13.1.1) Calendar: Use a calendar to determine elapsed time involving a time period of one week	Grade K: U1 Session 1.3 Classroom Routines: U1 Sessions 1.5, 1.6, 2.1, 2.2
	AR.3.M.13.7 (M.13.3.7) Temperature: Read temperatures on Fahrenheit and Celsius scales in intervals of two and five	U6 Sessions 1.1, 1.2, 1.3
	AR.3.M.13.1 (M.13.3.1) Calendar: Use a calendar to determine elapsed time from month to month	Grade K: U1 Session 1.3 Classroom Routines: U1 Sessions 1.5, 1.6, 2.1, 2.2

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.MD.1 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p>	<p>AR.4.M.12.2 (M.12.4.2) Temperature: Distinguish the temperature in contextual problems using the Fahrenheit scale on a thermometer</p>	<p>U6 Sessions 1.1, 1.2, 1.3, 1.4, 1.5</p>
	<p>AR.4.M.13.1 (M.13.4.1) Calendar: Using a calendar to determine elapsed time from month to month</p>	<p>See Grade K: U1 Session 1.3 Classroom Routines U1 Sessions 1.5, 1.6, 2.1, 2.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.MD.2 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm³ and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes multiplicative comparison problems (problems involving notions of “times as much.”))</p>	<p>AR.7.M.12.1 (M.12.7.1) Attributes and Tools: Understand, select and use the appropriate units and tools (metric and customary) to measure length, weight, mass and volume to the required degree of accuracy for real world problems</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>
	<p>AR.4.M.13.8 (M.13.4.8) Applications: Estimate and measure length, capacity/volume and mass using appropriate customary and metric units: -- Length: 1/2 inch, 1 cm; -- Perimeter: inches, feet, centimeters, meters; -- Area: square inches, square feet, square centimeters, square meters; -- Weight: pounds/ounces; -- Mass: kilograms/grams; -- Capacity: cups, pints, quarts, gallons; -- Volume: liters.</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>
	<p>AR.6.M.12.2 (M.12.6.1) Attributes and Tools: Identify and select appropriate units and tools from both systems to measure</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.MD.2 Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). (Excludes compound units such as cm³ and finding the geometric volume of a container.) Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem. (Excludes multiplicative comparison problems (problems involving notions of “times as much.”))</p>	<p>AR.3.M.13.9 (M.13.3.9) Applications: Estimate and measure length, capacity/volume and mass using appropriate customary units: -- Length: 1 inch; -- Perimeter: inches, feet, etc; -- Area: square inches (use models); -- Weight: pounds/ounces; -- Capacity: cups, pints, quarts, gallons.</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>
	<p>AR.5.M.12.1 (M.12.5.1) Attributes and Tools: Identify and select appropriate units and tools to measure</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>
	<p>AR.5.M.13.2 (M.13.5.2) Attributes and Tools: Determine which unit of measure or measurement tool matches the context for a problem situation</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.MD.3 Represent and interpret data. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</p>	<p>AR.3.DAP.15.1 (DAP.15.3.1) Data Analysis: Read and interpret pictographs and bar graphs in which symbols or intervals are greater than one</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 2.1, 2.2, 2.4, 3.5</p>
	<p>AR.3.DAP.15.2 (DAP.15.3.2) Data Analysis: Match a set of data with a graphical representation of the data</p>	<p>Opportunities to address this topic may be found on the following pages: U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 2.1, 2.2, 2.4, 3.5</p>
	<p>AR.2.DAP.14.1 (DAP.14.2.1) Collect, Organize and display data: Identify the purpose for data collection and collect, organize, record and display the data using physical materials (pictographs, Venn diagrams and vertical and horizontal bar graphs)</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, , 1.7, 1.8, 2.1, 2.2, 2.4, 3.5 U9 Session 1.1</p>
	<p>AR.3.DAP.14.1 (DAP.14.3.1) Collect, Organize and display data: Design a survey question after being given a topic and collect, organize, display and describe simple data using frequency tables or line plots, pictographs, and bar graphs</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5</p>
	<p>AR.5.DAP.14.3 (DAP.14.5.3) Collect, organize and display data: Construct and interpret frequency tables, charts, line plots, stem-and-leaf plots and bar graphs</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, , 1.7, 1.8, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued) CC.3.MD.3 Represent and interpret data. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.	AR.5.DAP.15.1 (DAP.15.5.1) Data Analysis: Interpret graphs such as line graphs, double bar graphs, and circle graphs	U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, 1.8, 2.1, 2.2, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5
	AR.4.DAP.15.1 (DAP.15.4.1) Data Analysis: Represent and interpret data using pictographs, bar graphs and line graphs in which symbols or intervals are greater than one	U2 Sessions 1.4, 1.5, 1.8, 2.4
CC.3.MD.4 Represent and interpret data. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.	AR.3.M.13.8 (M.13.3.8) Applications: Use appropriate customary measurement tools for length, capacity and mass	U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3
	AR.4.M.13.8 (M.13.4.8) Applications: Estimate and measure length, capacity/volume and mass using appropriate customary and metric units: -- Length: 1/2 inch, 1 cm; -- Perimeter: inches, feet, centimeters, meters; -- Area: square inches, square feet, square centimeters, square meters; -- Weight: pounds/ounces; -- Mass: kilograms/grams; -- Capacity: cups, pints, quarts, gallons; -- Volume: liters	U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.MD.4 Represent and interpret data. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units— whole numbers, halves, or quarters.</p>	<p>AR.3.M.13.9 (M.13.3.9) Applications: Estimate and measure length, capacity/volume and mass using appropriate customary units: -- Length: 1 inch; -- Perimeter: inches, feet, etc; -- Area: square inches (use models); -- Weight: pounds/ounces; -- Capacity: cups, pints, quarts, gallons</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U9 Sessions 3.1, 3.2 U9 ICCG 4A.1, 4A.2, 4A.3</p>
	<p>AR.5.DAP.14.3 (DAP.14.5.3) Collect, organize and display data: Construct and interpret frequency tables, charts, line plots, stem-and-leaf plots and bar graphs</p>	<p>U2 Sessions 1.1, 1.2, 1.3, 1.4, 1.5, , 1.7, 1.8, 2.1, 2.2, 2.3, 2.4, 2.5, 2.6, 2.7, 3.1, 3.2, 3.3, 3.4, 3.5</p>
	<p>AR.5.M.13.3 (M.13.5.3) Attributes and Tools: Draw and measure distance to the nearest cm and ¼ inch accurately</p>	<p>See opportunities to address this topic: U2 Sessions 3.1, 3.2, 3.3, 3.4 U4 Sessions 1.1, 1.2, 1.3, 1.4</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.MD.5 Geometric measurement: understand concepts of area and relate area to multiplication and to addition. Recognize area as an attribute of plane figures and understand concepts of area measurement. -- a. A square with side length 1 unit, called “a unit square,” is said to have “one square unit” of area, and can be used to measure area. -- b. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p>	<p>AR.K.M.13.7 (M.13.K.7) Area: Cover a figure with one type of shape and tell how many it takes to cover</p>	<p>U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6</p>
	<p>AR.2.M.13.13 (M.13.2.13) Area: Find the area of a region by counting squares on a grid</p>	<p>U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6</p>
	<p>AR.1.M.13.10 (M.13.1.10) Area: Cover a figure with squares and tell how many it takes</p>	<p>U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6</p>
	<p>AR.5.M.12.4 (M.12.5.4) Attributes and Tools: Understand when to use linear units to describe perimeter, square units to describe area or surface area, and cubic units to describe volume, in real world situations</p>	<p>U2 Sessions 3.1, 3.2, 3.3, 3.4 U4 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.4, 2.5, 2.6 U9 Sessions 3.1, 3.2</p>
	<p>AR.5.NO.1.6 (NO.1.5.6) Rational Numbers: Use models to differentiate between perfect squares up to 100 and other numbers</p>	<p>U5 Session 3.2</p>
	<p>AR.6.M.13.4 (M.13.6.4) Attributes and Tools: Establish and apply formulas to find area and perimeter of triangles, rectangles, and parallelograms</p>	<p>U4 Sessions 1.2, 1.3, 1.4, 2.1, 2.2, 2.4, 2.5, 2.6</p>
	<p>AR.5.M.13.4 (M.13.5.4) Attributes and Tools: Develop and use strategies to solve real world problems involving perimeter and area of rectangle</p>	<p>U4 Sessions 1.2, 1.3, 1.4, 2.1, 2.4, 2.5, 2.6</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
(Continued)	AR.4.M.13.10 (M.13.4.10) Area: Use strategies for finding the area of a rectangle	U4 Sessions 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.3.M.13.11 (M.13.3.11) Area: Find the area of any region counting squares and half-squares	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
CC.3.MD.6 Geometric measurement: understand concepts of area and relate area to multiplication and to addition. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	AR.3.M.13.11 (M.13.3.11) Area: Find the area of any region counting squares and half-squares	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.4.M.13.10 (M.13.4.10) Area: Use strategies for finding the area of a rectangle	U4 Sessions 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.5.M.13.4 (M.13.5.4) Attributes and Tools: Develop and use strategies to solve real world problems involving perimeter and area of rectangle	U4 Sessions 1.2, 1.3, 1.4, 2.1, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.2.M.13.13 (M.13.2.13) Area: Find the area of a region by counting squares on a grid	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.K.M.13.7 (M.13.K.7) Area: Cover a figure with one type of shape and tell how many it takes to cover	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.1.M.13.10 (M.13.1.10) Area: Cover a figure with squares and tell how many it takes	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
CC.3.MD.7 Geometric measurement: understand concepts of area and relate area to multiplication and to addition. Relate area to the operations of multiplication and addition.	AR.5.M.13.4 (M.13.5.4) Attributes and Tools: Develop and use strategies to solve real world problems involving perimeter and area of rectangle	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.6.M.13.4 (M.13.6.4) Attributes and Tools: Establish and apply formulas to find area and perimeter of triangles, rectangles, and parallelograms	U5 ICCG 3.1A
CC.3.MD.7a Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	AR.4.M.13.10 (M.13.4.10) Area: Use strategies for finding the area of a rectangle	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
CC.3.MD.7b Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning.	AR.4.M.13.10 (M.13.4.10) Area: Use strategies for finding the area of a rectangle	U4 Sessions 2.1, 2.2, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.5.M.13.4 (M.13.5.4) Attributes and Tools: Develop and use strategies to solve real world problems involving perimeter and area of rectangle	U4 Sessions 1.2, 1.3, 1.4, 2.1, 2.4, 2.5, 2.6 U5 ICCG 3.1A
CC.3.MD.7c Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.	AR.5.NO.2.3 (NO.2.5.3) Number theory: Identify the distributive property by using physical models to solve computation and real world problems	U5 Session 3.5 U5 ICCG 3.5A

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
CC.3.MD.7d Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	No matches in Arkansas Frameworks	U4 Sessions 2.3, 2.4, 2.5 U4 ICCG 2.5A U5 ICCG 3.1A, 3.5A
CC.3.MD.8 Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different area or with the same area and different perimeter.	AR.4.M.13.9 (M.13.4.9) Perimeter: Use strategies for finding the perimeter of a rectangle	U4 Sessions 1.2, 1.3, 1.4
	AR.5.M.13.4 (M.13.5.4) Attributes and Tools: Develop and use strategies to solve real world problems involving perimeter and area of rectangle	U4 Sessions 1.2, 1.3, 1.4, 2.1, 2.3, 2.4, 2.5, 2.6 U5 ICCG 3.1A
	AR.6.G.8.2 (G.8.6.2) Characteristics of Geometric Shapes: Investigate with manipulatives or grid paper what happens to the perimeter and area of a two-dimensional shape when the dimensions are changed	U4 Sessions 1.4, 2.1, 2.2, 3.2, 2.4, 2.6 U4 ICCG 2.5A
	AR.6.M.12.3 (M.12.6.3) Attributes and Tools: Compare and contrast the differences among linear units, square units, and cubic units	U2 Sessions 3.1, 3.2, 3.3, 3.4 U4 Sessions 1.1, 1.2, 1.3, 1.4, 2.1, 2.2, 2.4, 2.5, 2.6 U9 Sessions 3.1, 3.2

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.MD.8 Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures. Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different area or with the same area and different perimeter.</p>	<p>AR.3.M.13.10 (M.13.3.10) Perimeter: Find the perimeter of a figure by measuring the length of the sides</p>	<p>U4 Sessions 1.2, 1.3, 1.4</p>
<p>Geometry</p>		
<p>CC.3.G.1 Reason with shapes and their attributes. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p>AR.K.G.8.1 (G.8.K.1) Characteristics and Properties-Three Dimensional: Sort and describe three-dimensional solids (sphere, cube, cone, and cylinder) by investigating their physical characteristics</p>	<p>U9 Sessions 1.1, 1.2, 1.3, 1.4, 1.5</p>
	<p>AR.1.G.8.3 (G.8.1.3) Characteristics and Properties-Two Dimensional: Compare and make geometric figures (triangle, rectangle [including square] and circle) by investigating their physical characteristics independent of position or size</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions 2.1, 2.2 U9 Session 1.3</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
A Correlation of Investigations in Number, Data, and Space ©2012
to the Common Core State Standards Comparison
with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>(Continued) CC.3.G.1 Reason with shapes and their attributes. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p>AR.2.G.8.3 (G.8.2.3) Characteristics and Properties-Two Dimensional: Identify, classify and describe two-dimensional geometric figures (rectangle [including square], triangle and circle) using concrete objects drawings, and computer graphics</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions 2.1, 2.2 U9 Session 1.3</p>
	<p>AR.3.G.8.2 (G.8.3.2) Characteristics and Properties-Two Dimensional: Identify regular polygons with at least 4 sides (square, pentagon, hexagon and octagon)</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions 2.1, 2.2 U9 Session 1.3</p>
	<p>AR.5.G.8.1 (G.8.5.1) Characteristics of Geometric Shapes: Identify and model regular and irregular polygons including decagon</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions 2.1, 2.2 U9 Session 1.3</p>
	<p>AR.4.G.8.2 (G.8.4.2) Characteristics and Properties-Two Dimensional: Identify regular and irregular polygons including octagon</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 U7 Sessions 2.1, 2.2 U9 Session 1.3</p>
	<p>AR.9-12.R.G.4.1 (R.4.G.1) Explore and verify the properties of quadrilaterals</p>	<p>U4 Sessions 1.5, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide

Part 2
 A Correlation of Investigations in Number, Data, and Space ©2012
 to the Common Core State Standards Comparison
 with Arkansas Student Learning Expectations for Mathematics

Common Core State Standards for Mathematics Grade 3	Arkansas Student Learning Expectations for Mathematics Grade 3	Investigations in Number, Data, and Space Grade 3
<p>CC.3.G.2 Reason with shapes and their attributes. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part is $\frac{1}{4}$ of the area of the shape.</p>	<p>AR.1.G.11.2 (G.11.1.2) Spatial Visualization and Models: Recognize that new figures can be created by combining and subdividing models of existing figures</p>	<p>U7 Sessions 2.1, 2.2</p>
	<p>AR.2.G.11.2 (G.11.2.2) Spatial Visualization and Models: Create new figures by combining and subdividing models of existing figures</p>	<p>U7 Sessions 2.1, 2.2</p>
	<p>AR.4.G.11.2 (G.11.4.2) Spatial Visualization and Models: Create new figures by combining and subdividing models of existing figures in multiple ways and record results in a table</p>	<p>U7 Sessions 2.1, 2.2</p>

Curriculum Units Grade 3

- U1** Trading Stickers, Combining Coins
- U2** Surveys and Line Plots
- U3** Collections and Travel Stories
- U4** Perimeter, Angles, and Area
- U5** Equal Groups

- U6** Stories, Tables, and Graphs
- U7** Finding Fair Shares
- U8** How Many Hundreds? How Many Miles?
- U9** Solids and Boxes
- ICCG** Investigations and the Common Core State Standards Guide